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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/888,943	06/25/2001	William A. Mittelstadt	56842USA4A.002	9282
32692	7590	08/09/2006	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427				PATEL, NIHIL B
ART UNIT		PAPER NUMBER		
3743				

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/888,943	MITTELSTADT ET AL.
Examiner	Art Unit	
Nihir Patel	3743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on July 31st, 2006.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 15-50 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 15-20,23-35 and 38-50 is/are rejected.

7) Claim(s) 21,22,36,37,46 and 47 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 07.26.2006.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ .
5) Notice of Informal Patent Application (PTO-152)
6) Other: ____ .

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on July 31st, 2006 have been fully considered but they are not persuasive. The applicant argues that Japuntich does not teach valve flaps with a side profile having a curvature when the valve flap is not attached to a valve body or face mask, wherein the curvature, or a portion of the curvature, or a portion of the curvature, is at least partially flattened when the valve flap seals the opening. The examiner disagrees. The Japuntich reference does disclose a flexible flap preferably assumes a flat configuration. The keyword being preferably meaning the valve flap taught by Japuntich can have a valve flap with a side profile having a curvature when the valve flap is not installed to a valve body or face mask, wherein the curvature, or portion of the curvature, or a portion of the curvature, is at least partially flattened when the valve flap seals the opening and does not have to assume a flat configuration.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 28-35 and 39-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Japuntich et al. (US 5,509,436).

4. As to claim 28, Japuntich discloses a unidirectional fluid valve that comprises a face mask (10) having at least opening for receiving a unidirectional valve; and a unidirectional valve that comprises a valve body comprising a valve opening 52; and a valve flap having a first

portion attached to the valve body and an adjacent second portion that seals the valve opening, wherein the valve flap has a curvature from the first end to the second end when the valve flap is not attached to the valve body, and further wherein at least a portion of the curvature of the valve flap is at least partially flattened when the valve flap seals the valve opening.

5. **As to claim 29,** Japuntich discloses an apparatus wherein the valve opening is generally planar, and wherein the valve flap curvature biases the valve flap toward the valve opening when the valve flap is attached to the valve body to seal the valve opening (Refer to figures 3 and 4 and column 6 lines 33 through 67).

6. **As to claim 30,** Japuntich discloses an apparatus wherein the valve flap curvature biases the valve flap towards the valve opening to seal the valve opening, and wherein the bias of the valve flap toward the valve opening is sufficient to seal between the valve opening in any orientation of the unidirectional valve (see figures 3 and 4).

7. **As to claim 31,** Japuntich discloses an apparatus wherein the curvature in the valve flap comprises a constant curvature from the first end to the second end (see figures 3 and 4). Referring to claim 32, Japuntich discloses an apparatus wherein the curvature in the valve flap varies from the first end to the second end (see figures 3 and 4).

8. **As to claim 32,** Japuntich discloses an apparatus wherein the curvature in the valve flap varies from the first end to the second end (see figures 3 and 4).

9. **As to claim 33,** Japuntich discloses an apparatus wherein the facemask is formed of a filtering material (see column 5 lines 10-15).

10. **As to claims 34 and 35,** Japuntich discloses an apparatus wherein the unidirectional valve is an exhalation/inhalation valve (see column 11 lines 10 through 15).

11. **As to claim 38,** Japuntich discloses an apparatus that comprises a face mask 10 comprising an opening formed therethrough; and a unidirectional valve located over the opening in the face mask, the unidirectional valve comprising a valve flap 24 attached to the face mask over the opening, the valve flap 24 comprising a curvature from a first end to a second end when the valve flap is not attached to the face mask, wherein the curvature of the valve flap is at least partially flattened when the valve flap seals the opening in the face mask.

12. **As to claim 39,** Japuntich discloses an apparatus wherein the at least partially flattened curvature of the valve flap creates a bias that is substantial enough to keep the valve flap sealed over the opening in all orientations (see figures 3 and 4).

13. **As to claim 40,** Japuntich discloses an apparatus wherein the curvature of the valve flap comprises a constant curvature (see figures 3 and 4).

14. **As to claim 41,** Japuntich discloses an apparatus wherein the curvature of the valve flap varies from the first end to the second end (see figure 3 and 4).

15. **As to claim 42,** Japuntich discloses an apparatus wherein the opening is generally planar such that the curvature of the valve flap attached to the face mask over the opening is flattened when the valve flap seals the opening in the face mask (see figure 3 and 4).

16. **As to claim 43,** Japuntich discloses an apparatus wherein the facemask is formed of a filtering material (see column 5 lines 10-15).

17. **As to claims 44 and 45,** Japuntich discloses an apparatus wherein the unidirectional valve is an exhalation/inhalation valve (see column 11 lines 10 through 15).

Double Patenting

18. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or

improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

19. **Claims 15-18, 28, 38 and 48-50** are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims **13-16 and 26** of U.S. Patent No. 6,883,518. Although the conflicting claims are not identical, they are not patentably distinct from each other because the difference between claims 15, 28 and 38 of the current application and claims 13 and 26 of the patent ‘518 lies in the fact that the patent claims 13 and 26 includes many more elements and is thus much more specific. Thus the invention of claims 13 and 26 is in effect a “species” of the “generic” invention of claims 15, 28 and 38 of the current application. It has been held that the generic invention is “anticipated” by the “species”. See *In re Goodman*, **29 USPQ2d 2010 (fed. Cir. 1993)**. Since claims 15, 28 and 38 of the current application is anticipated by claims 13 and 26 of patent ‘518, it is not patentably distinct from claims 13 and 26 of patent ‘518. **Claim 16 of the current application**, the limitations can be found in claim 14 of patent ‘518. **Claim 17 of the current application**, the limitations can be found in claim 15 of patent ‘518. **Claim 18 of the current application**, the limitations can be found in claim 16 of

patent '518. **Claim 48 of the current application**, the limitations can be found in claim 26 of patent '518. **Claim 49 of the current application**, the limitations can be found in claim 26 of patent '518. **Claim 50 of the current application**, the limitations can be found in claim 26 of patent '518.

20. **Claims 15, 17-20 and 23-27** are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims **1, 2, 4-10, 12 and 18** of U.S. Patent No. 6,883,518 in view of Braun (US 4,934,362). **As to claim 15 of the current application**, claim 1 of patent '518 discloses all the limitations of claim 15 of the current application with the exception of providing a face mask having at least one opening for receiving a unidirectional valve. Braun discloses a unidirectional fluid valve that does provide a face mask having at least one opening for receiving a unidirectional valve, using unidirectional valve on a face mask is well known in the art as taught by Braun. Therefore it would have been obvious to use the face mask of Braun on the unidirectional valve of patent '518 or vice versa. **Claim 17 of the current application**, the limitations can be found in claim 10 of patent '518. **Claim 18 of the current application**, the limitations can be found in claim 8 of patent '518. **Claim 19 of the current application**, the limitations can be found in claim 4 of patent '518. **Claim 26 of the current application**, the limitations can be found in claim 9 of patent '518. **Claim 27 of the current application**, the limitations can be found in claim 12 of patent '518. **Claim 24 of the current application**, the limitations can be found in claim 6 of patent '518. **Claim 23 of the current application**, the limitations can be found in claim 5 of patent '518. **Claim 20 of the current application**, the limitations can be found in claim 2 of patent '518. **Claim 25 of the current application**, the limitations can be found in claim 7 of patent '518.

Allowable Subject Matter

21. Claims **21, 22, 36, 37, 46 and 47** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

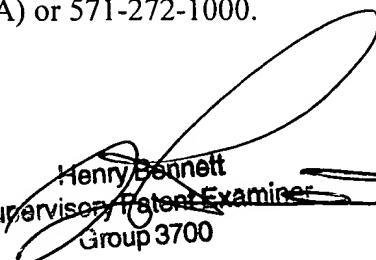
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nihir Patel whose telephone number is (571) 272-4803. The examiner can normally be reached on 7:30 to 4:30 every other Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennett can be reached on (571) 272-4791. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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